



## IN THE U.S. PATENT AND TRADEMARK OFFICE

APPLICANT : WATANABE ET AL.

SERIAL NO.: 09/667,301

FILED: September 25, 2000

FOR: GROUP: 3711

EXAMINER: Alvin A. Hunter

DECLARATION

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir,

I, Hideo Watanabe, resident of c/o Bridgestone Sports Co., Ltd., M&D center Chichibu, 20, Ohnohara, Chichibu-shi, Saitama-ken, Japan do hereby declare that:

1. I was graduated from Master Course of Mechanical Engineering, Faculty of Science and Technology of Tokyo University of Science, Japan in March 1990. From April 1990 to 1993, I was employed by Bridgestone Corporation, and in April 1993, I was transferred from Bridgestone Corporation to Bridgestone Sports Co., Ltd., the assignee of the above-identified application. I have been engaged in research and development relating to sporting goods such as golf balls in the laboratory of the Company.

2. I am one of the named inventors of the above-identified application and I am familiar with the subject matter disclosed in said

application.

3. In order to show the feature of the present invention, I conducted the following experiment.

[Experiment]

The object of the experiment is that the "compression" based on the present application in Examples 1-7 described in USP, 5,830,085 (Higuchi'058) are measured.

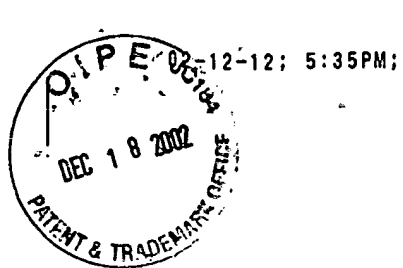
Solid cores of Examples 1-7 were prepared based on the description of USP, 5,830,085 (Higuchi'058). Specifically, Solid cores, Nos. 1, 2, 3, 4, 5, 1 and 13 were prepared by kneading components in the formulation shown in Table 1 of Higuchi'058 to form a rubber composition and vulcanizing it in a mold under conditions as shown in TABLE 1 of Higuchi'058, respectively. Each of the cores were measured for diameters, and the compression of each core was determined by measuring the amount of deflection, or deformation, by the core being measured when subjected to a load of 1275 N (130 kgf) from an initial load of 98 N (10 kgf). The results are shown in Table A. Next, compositions for the intermediate layer were milled as shown in TABLE 2 of Higuchi'058 and injection molded over the solid core. Each gage of the intermediate layer of Examples 1-7 was calculated by the equation of  $\frac{(\text{the diameter of the spherical body enclosing the intermediate layer on the solid core} - \text{the diameter of the solid core})}{2}$ . Furthermore, compositions for the cover as shown in TABLE 2 of Higuchi'058 were injection molded over the intermediate layer, obtaining three-piece solid golf ball. The compression of each spherical body enclosing the intermediate layer on the solid core was measured, respectively.

**Table A**

<b>Examples</b>		<b><u>1</u></b>	<b><u>2</u></b>	<b><u>3</u></b>	<b><u>4</u></b>	<b><u>5</u></b>	<b><u>6</u></b>	<b><u>7</u></b>
<b>Core</b>	<b>Type</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>1</b>	<b>13</b>
	<b>Diameter (mm)</b>	<b>36.5</b>	<b>36.1</b>	<b>35.1</b>	<b>37.9</b>	<b>36.5</b>	<b>36.5</b>	<b>36.5</b>
	<b>Compression (mm)</b>	<b>3.88</b>	<b>4.93</b>	<b>3.91</b>	<b>5.61</b>	<b>3.33</b>	<b>3.88</b>	<b>3.53</b>
<b>Intermediate layer</b>	<b>Type</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>N</b>	<b>N</b>
	<b>Gage (mm)</b>	<b>1.6</b>	<b>1.6</b>	<b>1.8</b>	<b>1.2</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>
	<b>Compression (mm)</b>	<b>3.57</b>	<b>4.63</b>	<b>3.40</b>	<b>5.76</b>	<b>2.95</b>	<b>3.47</b>	<b>3.13</b>
<b>Compression ratio (Intermediate layer/core)</b>		<b>0.92</b>	<b>0.94</b>	<b>0.87</b>	<b>1.03</b>	<b>0.89</b>	<b>0.89</b>	<b>0.89</b>
<b>Cover</b>	<b>Type</b>	<b>C</b>	<b>E</b>	<b>J</b>	<b>K</b>	<b>J</b>	<b>O</b>	<b>O</b>
	<b>Gage (mm)</b>	<b>1.5</b>	<b>1.7</b>	<b>2.0</b>	<b>1.2</b>	<b>1.5</b>	<b>1.5</b>	<b>1.5</b>
<b>Ball (entirety)</b>	<b>Diameter (mm)</b>	<b>42.7</b>	<b>42.7</b>	<b>42.7</b>	<b>42.7</b>	<b>42.7</b>	<b>42.7</b>	<b>42.7</b>

\* The type of core, intermediate layer and cover is corresponding to the component (No.) described in TABLE 1 and 2 of Higuchi'058

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated this 12th day of December, 2002

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Hideo Watanabe